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| 09/862,858 | 05/22/2001 | Robert B. Chaffee | C0852/7013 JNA | 8373 |
| 37462 | 7590 | 06/22/2004 | EXAMINER | |
| LOWRIE, LANDO & ANASTASI RIVERFRONT OFFICE ONE MAIN STREET, ELEVENTH FLOOR CAMBRIDGE, MA 02142 | | | CONLEY, FREDRICK C | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3673 | |

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/862,858

Applicant(s)

CHAFFEE, ROBERT B.

Examiner

Fredrick C Conley

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-40 and 55-73 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7, 9-20, 22-27, 30-34, 37-40, 55, 56, 58, 60-64, 66-69 and 71-73 is/are rejected.
- 7) ☒ Claim(s) 4, 21, 28, 29, 35, 36, 57, 59, 65 and 70 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-7, 9-15, 18-20, 22-27, 30-34, 55, 62-64, 66-69, and 71-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 1,519,380 to Kochanski in view of U.S. Pat. No. 1,423,590 to Zimmerman.

In reference to claim 1, Kochanski discloses a fastener having a depressible latch 14 (col. 2 lines 79-84) retaining a fastening element by interference with a lateral surface of the fastening element wherein the depressible latch is configured such that the fastening element is inhibited from escaping absent an external force to depress the depressible latch (fig. 8)(col. 2 lines 84-90). Kochanski fails to disclose a housing. Zimmerman discloses a fastener comprising a housing 2 and adapted to mate with a fastening element 4 wherein the housing is formed from a sheet metal that is inherently flexible (col. 2 lines 83-92). It would have been obvious to have the fastener of Kochanski with a housing as taught by Zimmerman in order to prevent the fastening element from being accidentally disconnected from the fastener.

Regarding claim 2, further including a flange 1 and wherein the housing and the latch are both connected to the flange.

Regarding claim 3, wherein the flange is configured so that it can be connected to a sheet of material (col. lines 78-82).

Regarding claim 5, wherein the housing comprises a side wall 11 and a retaining lip (12,13).

Regarding claim 6, wherein the retaining lip (12,13) defines a downwardly extending notch to accommodate a fastening element attachment mechanism.

Regarding claim 7, wherein the side wall 11 comprises a semi-circular section.

Regarding claim 9, wherein the latch is flexible (col. 2 lines 83-92).

Regarding claim 10, wherein the latch defines a flange generally parallel to a base of the housing and projecting towards the interior of the housing (fig. 11).

Regarding claim 11 wherein the latch defines a protrusion having a portion corresponding to the shape of the fastening element (fig. 11).

Regarding claim 12, wherein the fastener is formed in a sheet of material (col. 2 lines 77-82).

Claim 13, Kochanski discloses a fastener having a depressible latch 14 (col. 2 lines 79-84) retaining a fastening element by interference with a lateral surface of the fastening element wherein the depressible latch is configured such that the fastening element is inhibited from escaping absent an external force to depress the depressible latch (fig. 8)(col. 2 lines 84-90). Kochanski fails to disclose a housing. Zimmerman discloses a fastening assembly comprising a housing 2 sized and adapted to retain the fastening element. It would have been obvious to have a housing as taught by Zimmerman with the fastener of Kochanski in order to prevent the fastening element from being accidentally disconnected from the fastener.

Regarding claim 14, wherein the fastening element is flexible (col. 2 lines 83-92)(Zimmerman).

Regarding claim 15, wherein the housing is flexible (col. 2 lines 83-92)(Zimmerman).

In reference to claim 18, Kochanski discloses a fastener having a latch 14 with an upwardly inclining first portion to which pressure is applied when the fastening element is moved into engagement with the fastener and an arcuate second portion upon which the fastening element rests when in an engaged position (col. 2 lines 79-86), at least a part of the upwardly inclining first portion being disposed at a distance from the surface which is greater than the distance from the arcuate second portion to the surface (fig. 6 & 8) wherein the depressible latch is configured such that the fastening element is inhibited from escaping absent an external force to depress the depressible latch (fig. 8)(col. 2 lines 84-90). Kochanski fails to disclose a housing. Zimmerman discloses a fastener comprising a housing 2 and adapted to mate with a fastening element 4 and a depressible latch 10 positioned relative to the housing to retain the fastening element within the housing, wherein the latch comprises a protrusion having a first portion corresponding to the shape of the fastening element to which pressure is applied when the fastening element is moved into engagement. It would have been obvious to one having ordinary skill at the time of the invention to have a housing as taught by Zimmerman in order to prevent the fastening element from being accidentally disconnected from the fastener.

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Regarding claim 19, further including a flange 1 and wherein the housing and the latch are both connected to the flange (Zimmerman).

Regarding claim 20, wherein the flange is configured so that it can be connected to a sheet of material (col. 2 lines 78-82)(Zimmerman).

Regarding claim 22, wherein the housing comprises a side wall 11 and a retaining lip (12,13)(Zimmerman).

Regarding claim 23, wherein the retaining lip (12,13) defines a notch to accommodate a fastening element attachment mechanism (Zimmerman).

Regarding claim 24, wherein the sidewall comprises a semi-circular section (Zimmerman).

Regarding claim 25-26, wherein the housing and latch are flexible (col. 2 lines 83-92). Flexible is defined as capable of being bent or flexed. The apparatus disclosed by Zimmerman is constructed from a single flat piece of sheet metal and formed or bent with a die to form a housing with a flexible tongue, therefore the sheet metal would clearly have an inherent flexibility in order for the housing to be formed by the die.

Regarding claim 27, wherein the latch comprises a flange generally parallel to a base of the housing and projecting towards the interior (fig. 11).

Regarding claim 30, wherein the housing comprises a side wall 11 and a retaining lip 12 (Zimmerman).

Regarding claim 31, wherein the retaining lip comprises a notch 8 to accommodate a fastening element attachment mechanism.

Regarding claim 32, wherein the side wall 11 comprises a semicircular section.

Regarding claim 33, wherein the latch comprises a portion corresponding to a shape of the fastening element.

Regarding claim 34, wherein the latch is depressible and is positioned relative to the housing to retain the fastening element by interference with a lateral surface of the fastening element (col. 2 lines 79-86)(Kochanski).

Regarding claim 55, wherein the fastener is attached to an object and the latch is depressible in the direction of the object (col. 2 lines 79-86)(Kochanski).

Claim 62, Kochanski discloses a fastener having a depressible latch 14 (col. 2 lines 79-84) retaining a fastening element by interference with a lateral surface of the fastening element wherein the depressible latch is configured such that the fastening element is inhibited from escaping absent an external force to depress the depressible latch (fig. 8)(col. 2 lines 84-90). Kochanski fails to disclose a housing. Zimmerman discloses a fastener comprising a housing 2 adapted to retain a fastening element 4. It would have been obvious to have a housing as taught by Zimmerman with the fastener of Kochanski in order to prevent the fastening element from being accidentally disconnected from the fastener.

Claim 63, further including a flange and wherein the housing and the depressible latch are both connected to the flange 1.

Claim 64, wherein the flange is configured so that it can be connected to a sheet of material.

Claim 66, wherein the housing comprises a side wall 11 and a retaining lip 12.

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Claim 67, wherein the retaining lip comprises a notch 8 to accommodate a fastening element attachment mechanism.

Claim 68, wherein the side wall comprises a semi-circular section.

Claim 69, wherein the latch is flexible (col. 2 lines 83-92). Flexible is defined as capable of being bent or flexed. The apparatus disclosed by Zimmerman is constructed from a single flat piece of sheet metal and formed or bent with a die to form a housing with a flexible tongue, therefore the sheet metal would clearly have an inherent flexibility in order for the housing to be formed by the die.

Claim 71, wherein the latch comprises a portion corresponding to the shape of the fastening element.

Claim 72, wherein the fastener is formed in a sheet of material (col. 2 lines 82-85).

Claim 73, wherein the housing is configured such that the depressible latch is accessible such that an external force can be applied by an operator's finger to depress the latch .

Claims 16-17, 37-40, 56, 58, and 60-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,855,033 to Frissen in view of U.S. Pat. No. 1,519,380 to Kochanski in view of U.S. Pat. No. 1,423,590 to Zimmerman.

In reference to claims 16, Frissen discloses a bed having fastener assembly, comprising:

a fastening element/button member 29 (col. 2 line 42), a housing 31 connected to a bladder (23,25) and sized to mate with the fastening element. Frissen fails to disclose

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a latch positioned relative to the housing to retain the button within the housing.

Kochanski discloses a button having a depressible latch 14 (col. 2 lines 79-84) retaining a button element by interference with a lateral surface of the button element wherein the depressible latch is configured such that the button element is inhibited from escaping absent an external force to depress the depressible latch (fig. 8)(col. 2 lines 84-90). It would have been obvious to one having ordinary skill in the art at the time of the invention to employ the button member of Kochanski in order to prevent the fastener from becoming unintentionally fastened. Frissen fails to disclose a housing sized to retain a fastening element. Zimmerman discloses a housing 9 to retain a fastening element 4. It would have been obvious to one having ordinary skill in the art at the time of the invention to employ a housing sized to retain a fastening element as taught by Zimmerman with the bed of Frissen in order to prevent the fastening element from being accidentally disconnected from the fastener.

Claim 17, Frissen, as modified, discloses all of the Applicant's claimed limitations except for comprising a flange wherein the housing and the depressable latch are connected to the flange and the flange is connected to the substantially fluid impermeable bladder. Zimmerman discloses the housing and the latch connected to a flange 1. It would have been obvious to one having ordinary skill in the art at the time of the invention to employ a flange as taught by Zimmerman with the fastener of Frissen in order to attach the button to the bed of Frissen.

Regarding claim 37, wherein the housing comprises a side wall 11 and a retaining lip 12 (Zimmerman).

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Regarding claim 38, wherein the retaining lip comprises a notch 8 to accommodate a fastening element attachment mechanism.

Regarding claim 39, wherein the side wall 11 comprises a semicircular section.

Regarding claim 40, wherein the latch comprises a portion corresponding to a shape of the fastening element.

Claim 56, wherein the flange is configured so that it can be connected to a sheet of material.

Claim 58, wherein the latch is flexible (col. 2 lines 83-92). Flexible is defined as capable of being bent or flexed. The apparatus disclosed by Zimmerman is constructed from a single flat piece of sheet metal and formed or bent with a die to form a housing with a flexible tongue, therefore the sheet metal would clearly have an inherent flexibility in order for the housing to be formed by the die.

Claim 60, wherein the latch comprises a portion corresponding to the shape of the fastening element.

Claim 61, wherein the fastener is formed in a sheet of material (col. 2 lines 82-85).

Allowable Subject Matter

Claims 4, 21, 28-29, 35-36, 57, 59, 65, and 70 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments


Applicant's arguments with respect to claims 1-7, 9-40, and 55-73 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fredrick C Conley whose telephone number is 308-7468. The examiner can normally be reached on m-th m-fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on 308-2978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



TERI PHAM LUU
PRIMARY EXAMINER